5820 Lilley Road, Suite 4, Canton, MI 48187 5 (313) 981-1880 ● FAX (313) 981-4244

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION EPA CONTRACT 68-01-7367

Mr. Jason El-Zein On-Scene Coordinator Emergency Response Section U.S. Environmental Protection Agency 9311 Groh Road Grosse Ile, Michigan 48138 April 11, 1990

Re: Cost projection for fencing at Albion-Sheridan Township Landfill

Dear Mr. El-Zein:

Attached is a draft of the cost projections for the installation of fencing and gates at the Albion-Sheridan Township Landfill located at 2977 Division Road in Albion, Michigan.

Scenario 1 entails security fencing and gates at the north and south sides of the site and at the trails leading to the site from the east and west, as determined during the site visit and measurements taken on April 9, 1990 (Figure 1). Scenario 2 entails security fencing along the entire length of the east and west sides of the site in addition to the security fencing outlined in scenario 1 (Figure 2). Scenario 3 entails snow fencing along the entire length of the east and west sides of the site in addition to the security fencing outlined in scenario 1 (Figure 3).

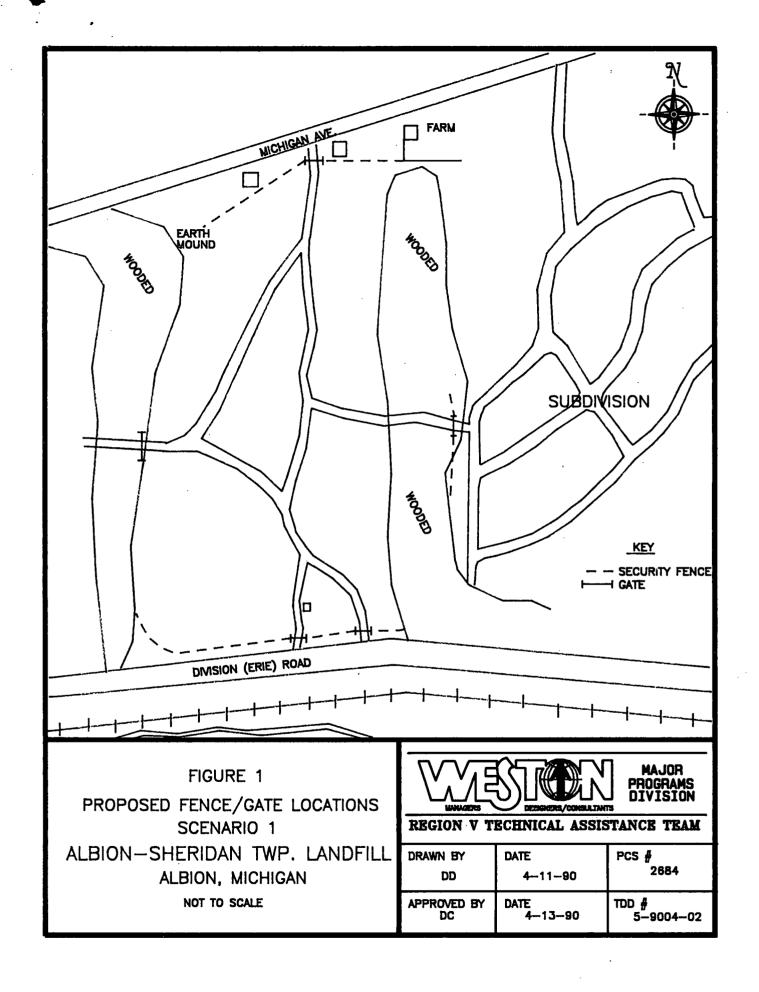
The following estimates were made in developing the cost projections for these scenarios:

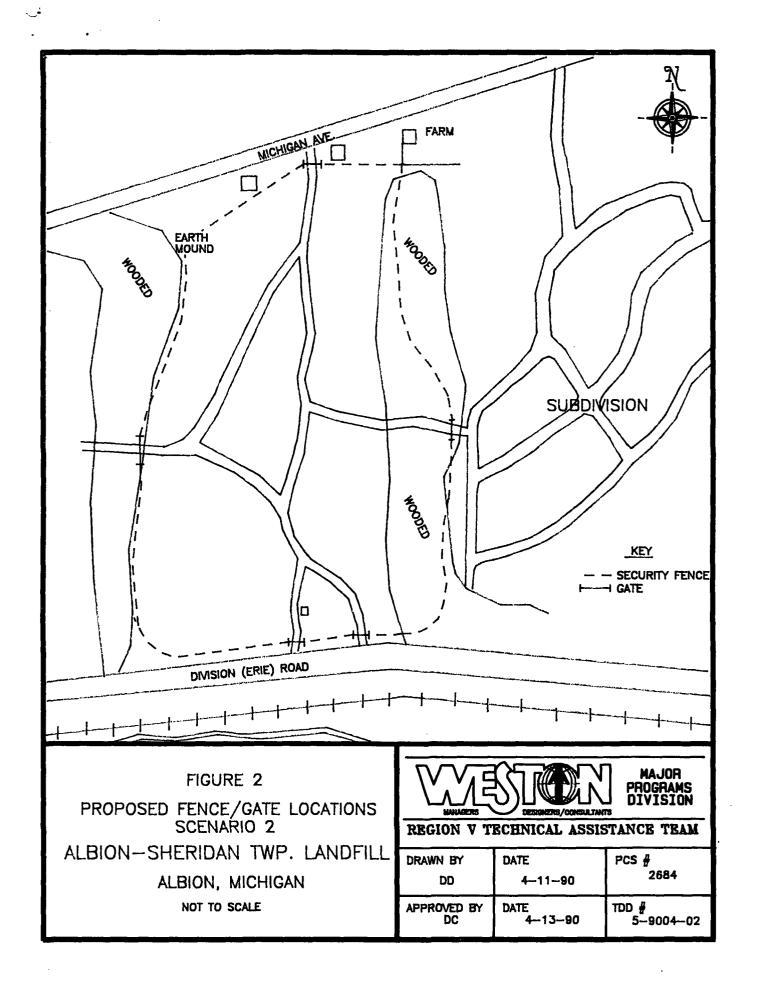
- o the east-west length of the site is approximately ½ mile (based on quadrangle map)
- o the security fence used is an eight foot chain-link fence with three strands of barbed wire at the top.

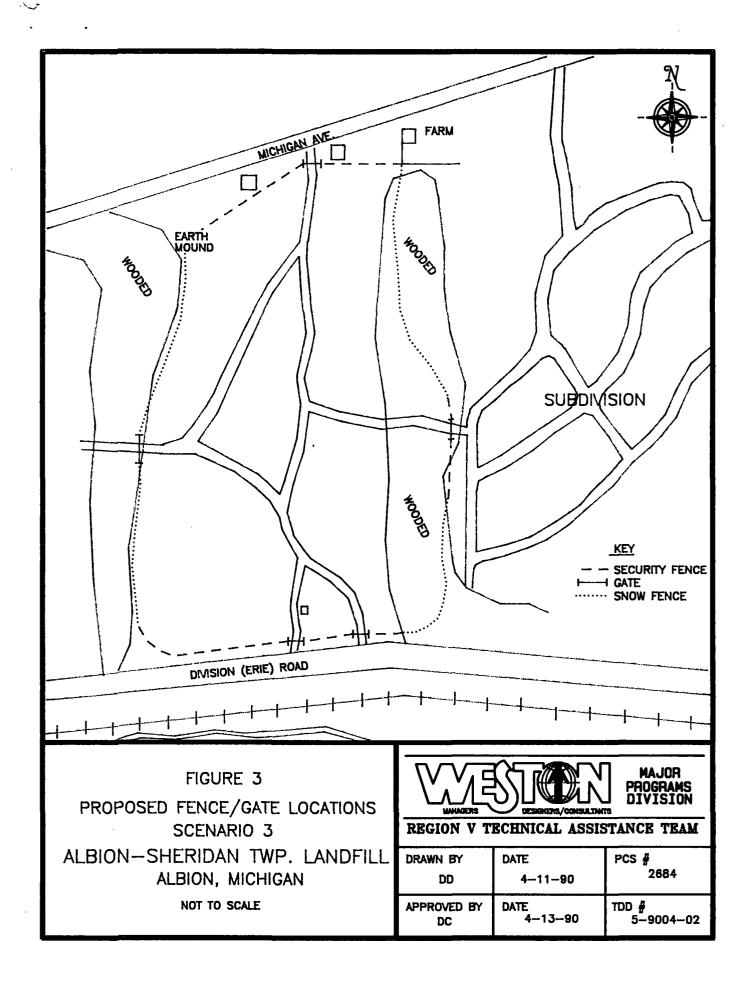
CONTINUED



Roy F. Weston, Inc.
MAJOR PROGRAMS DIVISION
In Association with ICF Technology, Inc., C.C. Johnson & Malhotra, P.C., Resource Applications, Inc., and R.E. Sarriera Associates







Page Two Albion-Sheridan Township Landfill April 11, 1990

The total costs for scenarios 1, 2, and 3 are estimated as follows:

0	Scenario	1	\$ 28,000.00
0	Scenario	2	\$ 140,000.00
0	Scenario	3	\$ 40,000.00

Should you have any questions, or require additional information, please feel free to contact us.

Very truly yours,

ROY F. WESTON, INC.

Ann Benda

Environmental Scientist

AB/jj

Attachments

Cost Projection Scenario: ALBION LF FENCE-SCENARIO 1 Page: 1

Projection ID No.: N/S

Cleanup Contractor: OH MATERIALS

Date: 04/09/90

TAT Contractor: WESTON

Cost Projection Summary

Contractor Personnel Contractor Equipment Subcontractors	2,282.40 213.35 14,773.70
Cleanup Contractor Subtotal	17,269.45
Extramural Subtotal 15 % Extramural Contingency	17,269.45 2,590.42
Extramural Subtotal	19,859.87
TAT Personnel	1,113.60
Total TAT Costs Extramural Subtotal 15 % Project Contingency	1,113.60 20,973.47 3,146.02
Total Extramural Cost	24,119.49
EPA Regional Personnel EPA Headquarters Direct (O % of Regional Hours)	1,565.00 0.00
EPA Indirect	2,040.00
EPA Total	3,605.00
Project Total	27,724,49

Cost Projection Scenario: ALBION LF FENCE-SCENARIO 1

Projection ID No.: N/S

Date: 04/09/90

Page: 2

Cleanup Contractor: OH MATERIALS TAT Contractor: WESTON

Project Scope

	,	Estimated
Number	Step/Milestone	Duration (Days)
. 1.	REMOVE OLD GATE	<u>.</u>
2	INSTALL FENCES AND GATES	5

Cost Projection Scenario: ALBION LF FENCE-SCENARIO 1

Projection ID No.: N/S Cleanup Contractor: OH MATERIALS Date: 04/09/90

TAT Contractor: WESTON

Page: 3

Contractor Personnel

يوينكس الماسي

	: 1004 1100 1100 1100					
Job Category	No. Emplyes	No. Days	Hrs per day	Labor	PD.Lodge Travel	Total Charge
FOREMAN 1	, 1	-5	8.0	1287.20	442.16	1729,36
LABORERS	<u>.i.</u>	<u>1.</u>	8.0	257.44	0.00	257.44
EQUIP OPERATOR	1	1.	8.0	295.60	0.00	295.60
		Tat	al Personne	ol Cost:	·	2282.40
Contractor Equip	- 4-544 54-64 43941 43144					
Equipment	F	E ()	Stby Mob	/Dmob Deco	"	Total

Equipment Item	Reg Days	Stby Days	Mob/Dmob Hours	Decon Hours	Mileage	Total Charge
,						
TRUCK PICK UP	5	Q	0	0	N/A	170.68
TRUCK PICK UP	1	0	0	O	N/A	42.67
	Tc	otal Equi	ipment Cost	. n		213.35

bcontractors

Subcontractor	Service .	Total Charge
STAR EQUIPMENT STAR FENCE	BACKHOE FENCING	605.70 14168.00
	Total Subcontractor Cost:	14773.70

TAT Personnel

Level	No. TATMs	No. Days	Hrs per day	Hr Rate	Labor	PD,Lodge Travel	Total Charge
*							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
PL2	1	155, 151,	8.0	27.84	1113.60	0.00	1113.60

Cost Projection Scenario: ALBION LF FENCE-SCENARIO 1

Projection ID No.: N/S

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Cleanup Contractor: OH MATERIALS

Date: 04/09/90

TAT Contractor: WESTON

3605.00

_evel	No. TATMs	No. Days	Hrs per day	Hr Rate	Labor	PD,Lodge Travel	Total Charge
A RE	rest (Sbl/A)	PERSONNEI		otal TAT Pers	sonnel Cost:		1113.60
1"! FAE.	: and and and and and and and :	- E.P. C. CIMMAE.	(./(.) 5) 5				
Tit	:le	No Day	o. Hrs p ys Day	oer Hr Rate	Labor	PD.Lodge Travel	Total Charge
Tit		Day		Rate	Labor 1200.00	Travel .	
Tit		Day	ys Day 3 8.0	Rate	1200.00	Travel	Charge
		Day	ys Day 3 8.0 E) 30.00	1200.00 Personnel Cos	Travel	Charge 1565,00

Total EPA Cost:

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Cost Projection Scenario: ALBION LF FENCE-SCENARIO 2

Projection ID No.: NSEW Cleanup Contractor: OH MATERIALS Date: 04/09/90 TAT Contractor: WESTON

Cost Projection Summary

Contractor Personnel Contractor Equipment Subcontractors	13,541.77 640.05 75,006.76
Cleanup Contractor Subtotal	89,188,58
Extramural Subtotal 15 % Extramural Contingency	89,188.58 13,378.29
Extramural Subtotal	102,566.87
TAT Personnel	6,681.60
Total TAT Costs Extramural Subtotal 15 % Project Contingency	6,681.60 109,248.47 16,387.27
Total Extramural Cost	125,635.74
EPA Regional Personnel EPA Headquarters Direct (0 % of Regional Hours)	6,260,00 0,00
EPA Indirect	8,160.00
EFA Total	ii fiy find a OU
Project Total	140,055.74

Cost Projection Scenario: ALBION LF FENCE-SCENARIO 2

Projection ID No.: NSEW

Date: 04/09/90

Cleanup Contractor: OH MATERIALS

TAT Contractor: WESTON

Project Scope

		Estimated			
Number	Step/Milestone	Duration (Days)			
1	REMOVE OLD GATE	Ĵ.			
2	CLEAR FENCE PATH GATES	<u></u>			
3	INSTALL FENCE AND GATES	30			

Cost Projection Scenario: ALBION LF FENCE—SCENARIO 2

Projection ID No.: NSEW Cleanup Contractor: OH MATERIALS Date: 04/09/90

TAT Contractor: WESTON

75006.76

Contractor Personnel

Job	No.	No.	Hrs per	Labor	PD,Lodge	Total
Category	Emplyes	Days	day		Travel	Charge
FOREMAN 1	1	30	8.0	7723.20	2652,97	10376.17
LABORERS	2	5	8.0	2574.40	0,00	2574.40
EQUIP OPERATOR	1	2	8.0	591.20	0,00	591.20
		Tota	al Personnel	l Cost:		13541.77

Contractor Equipment

Equipment	Reg	Stby	Mob/Dmob	Decon	Mileage	Total
Item	Days	Days	Hours	Hours		Charge
TRUCK PICK UP	30	0	0	0	N/A	554.71
TRUCK PICK UP	2	0	0	0	N/A	85.34
•	Τc	otal Eou:	ioment Cost	. n		640.05

Subcontractors 1 8 10 10 10 50 Car and 10 8 40 80 10 10 10 10

Subcontractor	Service	Total Charge
SEDAN STAR EQUIPMENT STAR FENCE	TRANSPORTATION BACKHOE FENCING	302.85 1467.49 73236.42

Total Subcontractor Cost:

Cost Projection Scenario: ALBION LF FENCE-SCENARIO 2

Projection ID No.: NSEW Cleanup Contractor: OH MATERIALS Date: 04/09/90 TAT Contractor: WESTON

TAT Personnel

Level	No. TATMs	No. Days	Hrs per day	Hr Rate	Labor	PD,Lodge Travel	Total Charge		
PL2	1.	30	8.0	27.84	6681.60	0.00	6681.60		
			To	tal TAT Pers	sonnel Cost:		6681.60		
:A-RE	GIGNAL=I	PERSONNE	L=699¥9						
Tit	16	nN	os Hrave	r RHEe	Labor	Pharedo=	Cnarde		
OSC				, . ,	-ers48801°8os	st:1460.00	8548 : 88		
	EPA Headquarters Cost: 0.00 (Based on 0 % of Regional hours)								
			FB 10	Asiadaresao tai epa cos	2854 8 5 0 \$51	per hour)	8160.00 14420.00		

Cost Projection Scenario: ALBION LF FENCE-SCENARIO 3

Projection ID No.: SNOW Cleanup Contractor: OH MATERIALS Date: 04/09/90

TAT Contractor: WESTON

Cost Projection Summary

Contractor Personnel Contractor Equipment Subcontractors	4,042.07 256.02 21,695.35
Cleanup Contractor Subțotal	25,993.44
Extramural Subtotal 15 % Extramural Contingency	25,993.44 3,899.02
Extramural Subtotal	29,892.46
TAT Fersonnel	1,559.04
Total TAT Costs Extramural Subtotal 15 % Project Contingency	1,559.04 31,451.50 4,717.72
Total Extramural Cost	36,167.22
EPA Regional Personnel EPA Headquarters Direct (Q % of Regional Hours)	1,565.00
EPA Indirect	2,040.00
EPA Total	3,605.00
Project Total	39,774.22

Cost Projection Scenario: ALBION LF FENCE-SCENARIO 3 Page: 2

Projection ID No.: SNOW
Cleanup Contractor: OH MATERIALS

Date: 04/09/90

TAT Contractor: WESTON

Project Scope

Number	Step/Milestone		Estimated Duration (Days)
J .	REMOVE OLD GATE		1
	INSTALL FENCES AND GATES		
. 3	INSTALL SNOW FENCE	i	4

Cost Projection Scenario: ALBION LF FENCE-SCENARIO'3

Projection ID No.: SNOW

Date: 04/09/90

TAT Contractor: WESTON Cleanup Contractor: OH MATERIALS

Con	tr	ë) C	tc	F"	E.e	9 F	s.o	mm	$\oplus 1$
	: :::: ::::	1 122 121	:::::::::::::::::::::::::::::::::::::::	: :::: :::	:::::::::::::::::::::::::::::::::::::::	:::::	:::: :::::		

Job	No.	No.	Hrs per	Labor	FD,Lodge	Total
Category	Emplyes	Days	day		Travel	Charge
FOREMAN 1	1	7	8.0	1802.08	619.03	2421.11
LABORERS	2	2	8.0	1029.76	0.00	1029.76
EQUIP OPERATOR	.1.	2	8.0	591.20	0,00	591,20
		Tota	al Personne	1 Cost:		4042.07

Contractor Equipment

Equipment Item	Reg Days	Stby Days	Mob/Dmob Hours	Decon Hours	Mileage	Total Charge
				<u></u>		
TRUCK PICK UP	7	O	0	0	NZA	170.68
TRUCK PICK UP	2	O	0	0	N/A	85.34
	T	otal Equ	ipment Cost	. II		256.02

Total Equipment Cost:

ubcontractors

Subcontractor	Service	Total Charge	
STAR EQUIPMENT STAR FENCE	BACKHOE FENCING	1467.49 20227.86	
	Total Subcontractor Cost:	21695.35	

TAT Personnel

Level	No. TATMs	No. Days	Hrs per day	Hr Rate	Labor	PD,Lodge Travel	Total Charge
PL2	<u>i</u> .	7	. 8.0	27.84	1559.04	0.00	1559.04

Page: 4

Cost Projection Scenario: ALBION LF FENCE-SCENARIO 3

Projection ID No.: SNOW, Cleanup Contractor: OH MATERIALS Date: 04/09/90

TAT Contractor: WESTON

3605.00

TAT Personnel

Level	No. TATMs	No. Days	Hrs per day	Hr Rate	Labor	PD,Lodge Travel	Total Charge
,		-,,-					
			To	otal TAT Pe	rsonnel Cost:		1559.04

PA REGIONAL PERSONNEL COSTS

Title	No. Days	Hrs per Day	Hr Rate	Labor	PD,Lodge Travel	Totai Charge
osc	5	8.0	30.00	1200.00	365.00	1565.00
		EPA F	Regional Pe	ersonnel Cos	st. #	1565.00
			Headquarter ed on 0 % d	rs Cost: of Regional	hours)	0.00
			Indirect Co ed on 40 ho	ost: ours @ \$51 p	er hour)	2040.00

t Total EPA Cost: